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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,850	02/18/2004	Hideyuki Kubota	Q79919	9443
23373	7590	08/22/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			FALASCO, LOUIS V	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/779,850

Applicant(s)

KUBOTA, HIDEYUKI

Examiner

Louis Falasco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Papers Received

1. Applicants' amendments and remarks, filed 6/8/06 are acknowledged.

Claims

2. The claims are: 1, 2 and 4 to 8.

Claim Rejections - 35 U.S.C. §112; 35 U.S.C. §102 and 35 U.S.C. §103

3. Rejections made in the previous Office under 35 U.S.C. §112; 35 U.S.C. §102 and 35 U.S.C. §103 have been withdrawn in view of applicants amendments to the claims.

The following new rejections, under 35 U.S.C. §103, are made in response to applicants amendments.

Statutory Basis

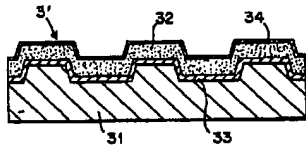
The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejections

4. Claims 1, 2 and 4 to 8 are rejected under 35 U.S.C. 103(a) as obvious over **Nagao et al** (US Patent 6759183) or **Saito et al** (US 6613459) – either one taken with either **Takeuchi et al** (US 4699835) or **Kato et al** (US 4581270).

Nagao et al and **Saito et al** are applied for reasons of record, teaching a magnetic master information carrier having a pattern of protrusions and recesses corresponding to information to be transferred to a slave medium. **Nagao et al** and **Saito et al** disclose a magnetic layer formed on substrate with a protrusion and recession pattern. The magnetic layer on the pattern has a protective coating. See **Nagao et al** Fig. 2

F I G . 2



and more specifically at Example 5 or **Saito et al** Fig. 8

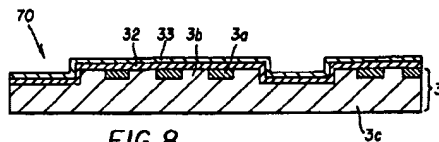


FIG. 8

see layers 32, 33 and col. 10 lns 59, 60. **Nagao et al** and

Saito et al differ from the amended and added claims by not disclosing ~~whether~~ ^{whether} or not the protective coating is also on an edge of the medium. However either of **Takeuchi et al** and **Kato et al** teach having the protective coating on side of the medium. Both **Takeuchi et al** and **Kato et al** teach the worker of ordinary skill the advantages of also having the protective coating on the edge for protecting the inner edge of the media. See **Takeuchi et al** at Figs. 7 and 6 where a protective coating is provided preventing

FIG. 7
FIG. 6
wear at the inner edge of the disk , col. 2 ln 66 to col. 3 ln 1;
col. 3 lns 6-9, 26-28; col. 4 ln 31,32, 37,38; col. 6 lns 35,36 and see Kato et al see Fig. 1A

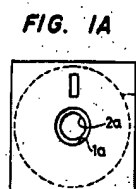


FIG. 1A showing the addition of wear preventing protective coating at the edge, and
col. 6 lns 49-51 teaching adding extra protective coating, enveloping a protective layer at
the inner edge of the disk. The worker having ordinary skill in the art would have
found it *prima facie* obvious to also include the protective layer coating on the edge of
the recording medium disc - as taught in Takeuchi et al and Kato et al for adding
protection to recording media edges of Nagao et al and Saito et al with the expectation
of increasing the wear resistance at the edges of the media.

With regard to the *free energy* level for the protective coating, specifically 57
mN/m-69 mN/m, this *free energy* would have been inherent in the Nagao et al
and Saito et al since the coating is composed of same DLC (Diamond-Like
Carbon) within the same 2 nm to 30 nm thickness applicants disclose for this *free*
energy (Nagao et al Fig. 2 DLC protective layer 34 and the 5 nm thickness in
Example 5 and col. 13 ln 13 or Saito et al Fig. 8 layer 32, and col. 10 lns 59, 6 at
col. 11 ln 14, 15 col. 11 ln 14, 15 *cf*, instant specification at page 10 lns 3-5, 7, 8).

The claimed *free energy* would be expected to be the same, ~~using~~ ^{using} the same

protective DLC coating and the same thickness dimension, e.g., see In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

Other References

5. **Bigelow et al** (US 5426535) is cited as being cumulative to **Takeuchi et al** or **Kato et al** teaching a master information carrier for magnetic transfer designed intimate contact at edges.

Answer to Arguments

Applicant's arguments with respect to the claims under consideration filed August 1, 2005 have been fully considered but they are considered moot in view of the new grounds of rejection

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The claims are 1, 2 and 4 to 8.

- No claim has been allowed.

INQUIRES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol D. Chaney, PhD can be reached at (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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08/14/06


CAROL CHANEY
SUPERVISORY PATENT EXAMINER